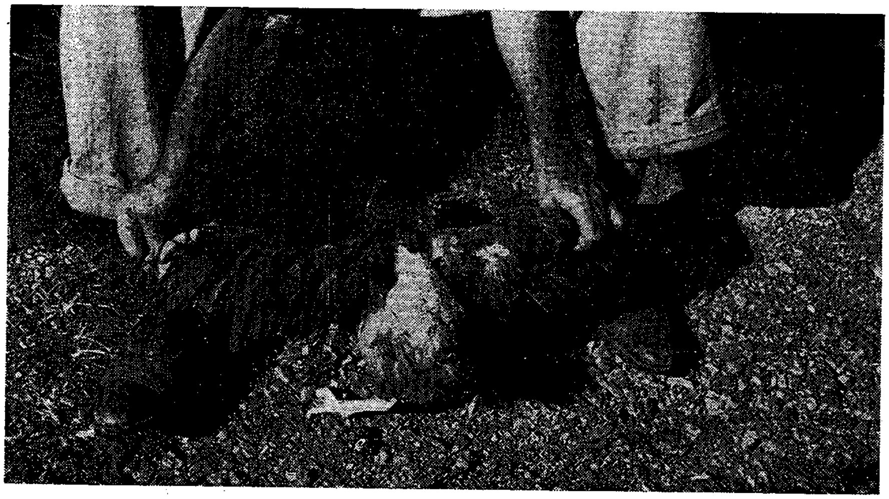
First Field Report on . . .

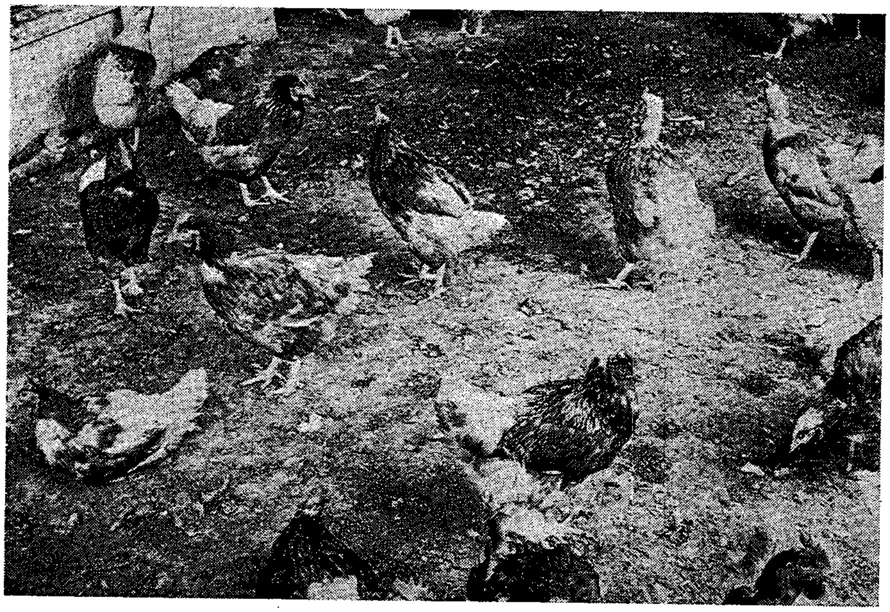
Hysteria in Meat-Type Birds

By Harold Weisberg



Typical feather condition and damage to back suffered by hysterical young broilers.

Barebacks on young pullets affected by the "Hysterical Fright-Flight" condition.



TODAY'S successful poultryman has almost had to become his own vet, to spot, identify and treat disease in his flock before the disease wipes out both him and his flock.

There now looms the possibility that tomorrow's successful poultryman may, in addition, have to become his own Doctor of Veterinary Psychiatry, for the newest poultry health problem may, in my experience and opinion, turn out to be largely a problem in psychiatry.

For lack of a better name, what skimpy literature is available refers to this condition as "Avian Hysteria." The little that is known about it is almost 100 percent negative. Scientists have pretty well established what avian hysteria **isn't.** What causes or precipitates it, what to do about it, how to anticipate or prevent it—these things are almost unmentioned in the literature. From our observation and bitter experience the name is apt, for the birds are certainly hysterical.

First Time in Meat Birds

The agreement on what hysteria in chickens isn't is pretty clear. It isn't a disease. It isn't nutritional in origin. It isn't flightiness. It isn't genetic—you can't blame it on the breeder, although most cases have been reported among Leghorn or other light-type laying stock, especially among pullets late in the growing period or at approximately peak production. No management practices have been identified as the cause. Except for our own case, we have found no reference to its existence among meat birds.

The best short description I have seen of this phenomenon is the title of a report by Drs. V. L. Sanger and A. H. Hamdy (right), of the Department of Veterinary Science, Ohio State University, appearing in the March 1, 1962, issue of The Journal of the American Veterinary Medical Association. They call it "A Strange Fright-Flight Behavior Pattern (Hysteria) in Hens." By way of discussion of the symptoms, again based on my own observations, the most accurate is that of S. F. Ridlen, University of Illinois Poultry Extension Specialist. He says:

"In affected flocks, hysterical milling occurs and some birds utter frightened sounds. Once this activity starts, it spreads through the house and may occur several times before it stops. Feather eating is typical . . . but cannibalism is not a major factor. The birds eat feathers out of the litter and barebacked birds are seen in the flock. Many birds have large tears on the back and in the tail region, apparently made by the toenails of other birds during milling. Symptoms are similar but more severe in hens than in pullets. Excitement is started by any noise or motion. (And sometimes by nothing detectable—H.W.)

"Birds run aimlessly and appear to be hunting a place to hide. The condition is not the same as flightiness. Between periods of excitement, hens may be very tame, and they do not necessarily run from the caretaker when they are milling. The condition first starts with piling and smothering, and all birds do not take part in the milling. When hysteria affects a flock, feed consumption is severely depressed and egg production may drop as much as one-half. The flock may be affected for several months."

Shocking to Watch

Pointless, aimless, completely illogical behavior is certainly characteristic. Recently, when I was tending a flock of two-month-old light-heavy pullets, they suddenly became hysterical, for the first time, after being frightened. It was never possible to detect the first bird to react. They seemed to rise together, like a wave, and continued that way for a while, clamoring all the time. They'd subside for a moment, then take off again. It was a terrifying, shocking thing to behold. I finally decided to leave them alone until they quieted down. The implausibility of this performance is a hard thing for a human to cope with.

Other scientists do not quite agree with Mr. Ridlen when he says that once it starts "it spreads through the house." Sanger and Hamdy refer to a case where the fright-flight behavior pattern of one pen was "clearly visible to the two other pens of chickens, and all the noises could be heard throughout the house, yet the other chickens were never affected."

This doesn't mean Mr. Ridlen is wrong. We have had it both ways. And Dr. Walter F. Hughes, Veterinary Pathologist of Kimber Farms, Fremont, California, in a personal communication to the author, stated, "it does not spread from flock to flock on the same poultry farm." Dr. Hughes is considered by Mr. Ridlen to be as expert as any on avian hysteria.

In turn, other experts are in disagreement with Dr. Hughes. He says that, in his experience, "sound has not been an important factor in cause." Yet Mr. Ridlen says, "excitement is started by any noise or motion." Michigan State University counsels, "Particular attention should be given to eliminating scare factors of shadows, noise and motion." In our experience, Ridlen and MSU are right; but if you want to perform a real miracle, try tending chickens without "shadows, noise or motion."

Has Various Forms

Again, in my opinion, what this all adds up to is that essentially the same condition has different manifestations, different forms. Both sets of observers correctly reported what they observed. The correlation in our case between fright and noise is unmistakable. It has happened so often, and over such a long period of time, that there is no avoiding the conclusion we have reached.

There is pretty consistent agreement among observers on the bare back, feather breaking and eating, including the unusual aspects. Sanger and Hamdy's Observation is, "Birds were bare of feathers in all affected flocks. Feathers on the neck, primary flight feathers and small feathers on the legs remained. All other feathers, including the tail, were broken off or pulled out. The skin was dark and there were many bruises and cuts. A noticeable characteristic of affected chickens was the habit of picking at the feathers. As soon as a wave of excitement stopped, the birds started pulling at their own broken feather fragments protruding from the follicles . . . scarcely ever picked feathers from other birds . . ."

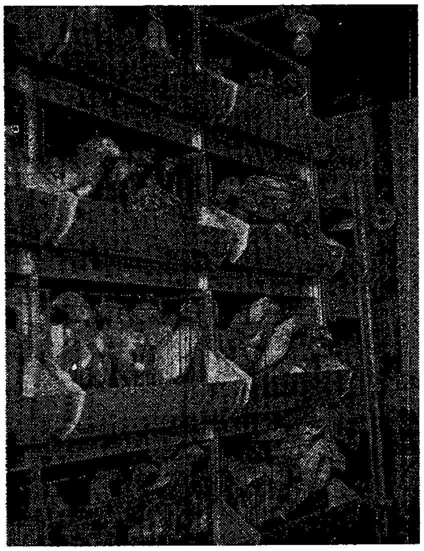
Typical back damage caused during mid-air milling of hysterical pullets.

We have often also observed the breaking of the primaries, and in several flocks, large scabs in the area of the preen gland. Often the birds have picked at their own glands until they were nonexistent, with only scabs remaining. Strange and uncharacteristic of normal chicken behavior was the pattern in a flock hatched January, 1961, and frightened in November. There are still many running around with bare backs and big scabs, yet not attractive objects of cannibalism among their pen-mates. I have seen them eating themselves, with blood running, and the other hens ignoring them.

These dressed specimens show the typical back damage to otherwise good birds.

Birds Break Batteries

In the case of our meat birds, which are raised in batteries in a well-built, insulated building adjacent to the henhouse, and also near all the other buildings, what we have seen is almost perfectly described by the quotation from Mr. Ridlen, with appropriate changes for the differences between raising in batteries and floors. Terror and panic has been so great, even among small birds, that the batteries have been broken and deformed. We now have to wire the grilles in place, and even that sometimes doesn't serve to contain the birds. When these birds have become hysterical, losses in unsalable birds have often been well over 50 percent, yet often the birds have been in good flesh. Their backs, however, were lacerated and scabby. With this really astronomical damage, losses from cannibalism in flocks has frequently been just zero!


Reaction of hysterical young meat birds to being fed. Some have already pushed out and are in hiding on the floor. Note feed troughs pushed away from battery, and bowed grilles. Frightened birds piled up, some even were pushed out backwards. A tape recording of noise these birds were making at the time is almost unbearable, the author says.

The force and power of even a few hysterical chickens is unbelievable. Besides the adverse effects on the grilles and water and feed troughs of our very well made batteries, the chickens have knocked them out of square, jumped on the sturdy floors to the point where they fall, spread the sides so we have had to reinforce them, and even deformed and split the metal tops. There have been times when they hit the tops hard enough to spring them and allow the escape of birds from the batteries. Bear in mind, this is being done by small birds—young broilers—if you want to really grasp the power hysteria can give them!

We have had hens raise up underneath nests with enough force to snap the wires by which the nests were suspended. They have hit the hanging feeders often and hard enough to ruin six dozen of them. On infrequent occasions they have managed to break the strong metal rods through the centers. Also infrequently, they have hit these feeders with enough force to snap the sashcord by which we suspend them. There isn't a pan left that they haven't bent, and none of the feeders will now hold an adjustment. The hens have hit objects with sufficient force to shatter their own breastbones, and don't you think that a hen's breastbone isn't a tough thing! I have seen their wing-power augmented by their terror to the point where they have flown onto objects seven and eight feet high—and these are six and seven pound hens.

Our poultry health problems have been slight. We haven't had any serious disease diagnosed in our meat

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AVIAN HYSTERIA

(From Page 10)

birds, except once when the birds were severely affected by hysteria. And on the few occasions when we have had any outbreaks of coccidiosis or enteritis in our pullets, there have always been a strong correlation with these severe frights, coming from low-flying military helicopters. Some of the affected layers have had unusually good livability records.

Symptoms Not Consistent

There have been times when every single chicken in the battery building has been affected. At other times, they seem most affected at one end. And at still other times, we can see it spreading like a disease, from the older birds to the younger ones. We usually separate the sexes in rearing our meat birds, and sometimes one sex seems more affected than the other. Inconsistency seems to be typical of some of the symptoms of avian hysteria.

The first really bad, typical case I remember among them involved only two tiers in a four-tier battery. The birds were siblings. Tending such birds becomes the most disagreeable possible chore on the farm. But the two tiers of this battery not affected never became affected. This was far from the usual situation, but with that outbreak it was a strange thing that actually did happen.

Noting the feather eating that Mr. Ridlen subsequently observed, I decided to make this change in the ration: I cut it 20 percent with ground oats and added a little methionine and enough feather meal to bring the protein content up to normal. The rate of growth was slowed down, the pigmentation was not the best, but the birds, when finally slaughtered, were in good flesh, and they were marketable.

Change in Environment Helps

One of the things that consistently seems to be beneficial is, for practical reasons, frequently impossible. That is a change in environment. For example, early this summer we had a bad outbreak among some broilers. I took 50 cockerels and moved them into a different building. They went from batteries to the floor. I didn't have time to clean the pen—not even to dust it or change the equipment. I just caught the birds and moved them there, giving them plenty of room. They rapidly adjusted to the completely altered environment, and they grew into as pretty a flock of roasters as I have ever seen.

Several years ago we learned that layers similarly affected could be taken as non-producers from the floor and put in cages in the same pen and become the most profitable birds on the place (see Everybodys Poultry Magazine, April, 1959). But if this can be done at all, it is only with a few birds, and for most people it represents an impossibility.

With laying stock, Kimber's people report benefits from adding about 60 pounds per ton of cultured yeast to the ration. Ridlen reports benefits from adding thiamine and pyridoxine to the diet.

What our experience adds up to is this: Hope and pray it doesn't happen to you. But if it does, throw the book away and play it by ear. Nobody can tell you what to do. People will think you don't know what you are talking about. And you'll end up an impoverished chicken psychiatrist.

Can chickens live on algae? After trying many feed formulations, researchers at the North Carolina Ag. Expt. Station are convinced the answer is, "Yes."

Perhaps someday we will have vats of algae located next to the poultry houses. Algae in liquid form will be pumped in to feed the chickens. Manure from the chickens will be piped back into the vats to feed the algae.

That's the prediction in Volume 20, Nos. 3-4, of "Research and Farming." (**Editor's Note:** And if consumers ever find out about it, per capita consumption will plummet down to zero.)

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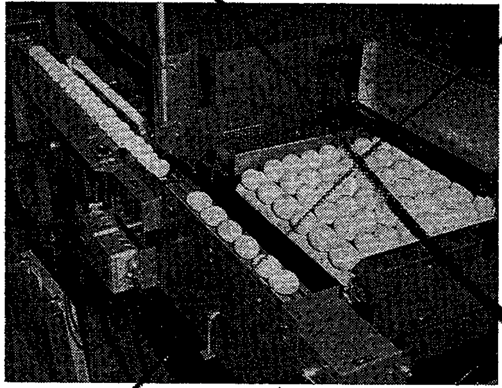

EGGS BEING TRANSFERRED TO WYLAND CANDLER-GRADERS

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